

CLAIMS

1. A method for screening for compounds safe for gastric mucosa, comprising:

preparing liposome serving as a cell membrane model that is
5 formed of a phospholipid and encapsulates a fluorescent dye;
allowing a test compound to react with the liposome; and
evaluating the leakage of the fluorescent dye from the
liposome.

2. The method for screening according to claim 1, wherein
10 the phospholipid for use in the cell membrane model is selected from
the group consisting of phosphatidylcholine, phosphatidylglycerol,
phosphatidylserine, phosphatidylinositol, phosphatidylethanolamine,
and cardiolipin.

3. The method for screening according to claim 1 or 2,
15 wherein evaluation of the leakage of the fluorescent dye comprises
measuring fluorescence emitted from the dye at an excited wavelength.

4. The method for screening according to any of claims 1
to 3, wherein the fluorescent dye is selected from the group
consisting of calcein, rhodamine, and fluorescein derivatives.

20 5. The method for screening according to any of claim 1 to
3, wherein the fluorescent dye is calcein.

6. The method for screening according to claim 5, wherein
the calcein leakage is determined by measuring fluorescence at 520
nm.

25 7. The method for screening according to any of claims 1
to 6, wherein the test compound is an anti-inflammatory compound.

8. The method for screening according to claim 7, wherein
the anti-inflammatory compound is a nonsteroidal anti-inflammatory
compound or a steroid compound.

30 9. The method for screening according to any of claims 1
to 6, wherein the test compound is a compound that acts to protect
gastric mucosa.

10. An anti-inflammatory compound safe for gastric mucosa,

obtained by the method for screening according to claim 7 or 8, or a salt thereof.

11. A gastric mucosa-protecting material, obtained by the method for screening according to claim 9.

5 12. A liposome serving as a cell membrane model for use in the screening of compounds having membrane toxicity to gastric mucosa, the liposome being formed of a phospholipid and encapsulating a fluorescent dye.

10 13. The liposome according to claim 12, wherein the fluorescent dye is selected from the group consisting of calcein, rhodamine, and fluorescein derivatives.

14. The liposome according to claim 12, wherein the phospholipid for use in the cell membrane model is selected from the group consisting of phosphatidylcholine, phosphatidylglycerol,
15 phosphatidylserine, phosphatidylinositol, phosphatidylethanolamine, and cardiolipin.